

worker of *boliviensis* is discovered it will be necessary to separate the two species generically, but the female of the latter resembles *filiformis* so closely, even to the curious Platythyrea-like sculpture, that had it been taken in South Africa, instead of South America, one would be tempted to regard it merely as the female of Mayr's species.

A NEW GENUS OF MYRMECOPHILOUS PHORIDÆ,
WITH NOTES ON SOME RELATED FORMS.^{1,2}

BY CHARLES T. BRUES.

Among the insects obtained by Dr. William M. Mann while a member of the Mulford Exploration in South America, are several species of wingless and subapterous Phoridæ. With the exception of a single species, all were taken in the nests of ants and are undoubtedly myrmecophilous. One, which proves to represent a new genus, occurs with *Tranopelta*, a hypogæic ant not hitherto known to harbor any phorid myrmecophiles, while the others are ecitophiles previously described from other parts of the South American continent.

The type of the new species is deposited in the United States National Museum.

Tranopeltoxenos gen. nov. (Fig. 1).

Entirely wingless. Head seen from above wide, twice as broad as long; antennæ widely separated, nearly round, their cavities separated; arista very short and thick, indistinctly pubescent; palpi strongly bristled; front with a series of six small, slightly proclinate, bristles along the anterior margin between the antennæ, and with eight macrochætæ disposed in two transverse rows; of these, the anterior row curves forward medially, with its lateral bristle behind the eye and the posterior row lies close to the occipital margin. Eyes very small; ocelli

¹Results Mulford Biological Exploration.—Entomology.

²Contribution from the Entomological Laboratory of the Bussey Institution, Harvard University. No. 215.

absent. Proboscis short, stout, heavily chitinized and porrect. Thorax very short on its dorsal surface (as indicated by a pair of humeral and posterior-lateral macrochætæ) but when the abdomen is bent down, exposing the posterior slope, it is seen to be nearly as long as the head. Abdomen large, ovate, fully twice as wide as the head and broadest at the third segment behind which it tapers obliquely; second to fifth segments each with a row of six long, but not very stout bristles extending across the disc near the middle; sixth with a denser fringe along the margin; sides of all the segments each with several additional bristles. First six segments heavily chitinized, without any membranous borders; following three segments tubular. Abdomen above moderately convex, below flat, so that in cross-section it is very strongly depressed. Legs rather short and stout; four posterior tibiæ ciliate on the edge.

Type: *T. manni* sp. nov.

This insect is quite unique and I cannot place it in any of the described genera in spite of the fact that these are already very numerous. There is no indication of any gland opening on the fifth abdominal segment and the abdomen is heavily chitinized over its entire dorsal surface. It resembles *Chonocephalus* Wandolleck, but the form of the abdomen is very different, the palpi are very densely bristled, and both the cephalic and thoracic chætotoxy disagree. *Chonocephalus*, also, so far as is known, is not myrmecophilous.

***Tranopeltoxenus manni* sp. nov. (Fig. 1).**

♀. Length 1.5 mm. Head and its appendages, thorax and legs, pale yellow; first five abdominal segments black or piceous, the sixth segment fuscous, the extrusible ones beyond whitish. Head above covered with sparse, appressed black hairs and at the sides anteriorly below the antennæ with a row of bristly hairs. Bristles of palpi dense, as long as the width of the palpus. Antennæ rather small, the arista but little longer than the diameter of the third joint. Post-antennal bristles rather stout, parallel, proclinate; inner bristles of lower frontal row rather

weak, set far apart, just above the antenna; bristles of upper row very large and curving backward very strongly. Second to fifth abdominal segments of about equal length, the third wider than the second; third and fourth narrower, the base of the fifth only two-thirds as wide as the second; sixth small; seventh to ninth fleshy, completely retractile. Transverse row of bristles

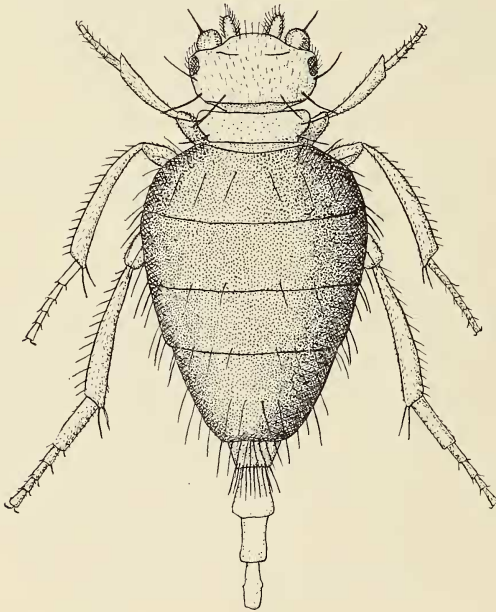


FIG. 1. *Tranopeltaxenos manni* sp. nov. ♀

on second segment placed before the middle, those of the third behind the middle, of the fourth and fifth some distance before the apex; sixth with a dense fringe at the apex.

Described from two specimens, taken in a nest of *Tranopelta gilva*, var. *amblyops* by Dr. W. M. Mann during December 1921. at Tumupasa, Bolivia. Type No. 25904, United States National Museum.

Acontistoptera brasiliensis Schmitz

Zool. Jahrb., Abth. f. Syst. vol. 37, p. 527 (1914)

Dr. Mann obtained this species on two occasions, once at Tumupasa, Bolivia (December 1921) with *Eciton cæcum* and again at Covendo, Bolivia, with the same ant. The type was found with *E. predator* in Santa Catarina, Brazil.

There is a slight disagreement between these specimens and Schmitz's original description, but I think this is undoubtedly due to the poor condition of the type which according to its describer is defective and glued to a card. The mesonotum bears a pair of marchochætæ on the disc in front of the pair shown in the original figure; so that there are two pairs of dorso-centrals instead of one. Also the abdomen bears a very small basal plate, elongate oval in form which is no doubt a vestige of the second tergite which is so large in most of the related genera. The three known species of *Acontistoptera* may be distinguished quite readily by the form of the thorax which is more or less triangular in all, but varies in width and length. Thus in *A. melanderi* Brues from Texas it is considerably longer than broad, in *A. mexicana* Malloch from Mexico, nearly twice as long as broad and narrowed almost to a point at the base of the scutellum, while in the present species the length scarcely exceeds the width.

Ecitomyia comes Schmitz.

Zool. Jahrb. Abth. f. Syst., vol. 37, p. 524 (*Ecitophora*)

This species is represented by two series, one taken with *Eciton burchelli* at Huachi, Bolivia and the other with *E. cæcum* at the mouth of the Rio Madidi, Bolivia (January 1922).

The specimens all agree exactly with Schmitz's original description and figures, but have no ocelli, and I feel quite positive that the hyaline spots referred to as ocelli are really the points where bristles have been broken off. Compared with *Ecitomyia wheeleri* Brues, *E. comes* may be readily recognized by the complete absence of the second chitinous plate (third tergite) on the abdomen and by the more heavily bristled wings.

Puliciphora venata Aldrich

Trans. Entom Soc. London, p. 436 (1896) (*Phora*).

Brues. Trans. Amer. Entom. Soc., vol. 29, p. 382 (1903).
(*Pachyneurella*)

Brues. Bull. Wisconsin Nat. Hist. Soc., vol. 12, p. 142 (1915)

I cannot distinguish a series of females taken at Espia, Rio Bopi, Bolivia from the West Indian form. Dr. Mann's specimens were attracted to masses of old cheese that had been abandoned by the expedition. A number of others in my collection from Grenada, B. W. I. were similarly trapped in jars containing chicken bones to which I found them attracted in great numbers.

THE PROBABLE OCCURRENCE OF PARTHENOGENESIS
IN *OCHTHIPHILA POLYSTIGMA*.
(DIPTERA)

BY A. H. STURTEVANT, NEW YORK CITY.

A total of 68 living specimens of *Ochthiphila polystigma* Meigen (one of the Ochthiphilinae, a subfamily included among the Acalypterate Diptera) was examined between August 23 and September 30, 1922. All were females; and there is no possibility that the males were found but not recognized as belonging to this species, since during that period no other member of the genus was taken. With the exception of a single female belonging to an apparently undescribed genus, the only other members of the subfamily Ochthiphilinae taken belonged to the very different genus *Leucopis*, and here both sexes were found. Eleven of the *O. polystigma* females were dissected, and three more were fixed and sectioned. In none of these was any trace of sperm found. I was during this time making a comparative study of the structure of the internal reproductive organs of the females of all the Acalypteræ, and was thus in a position to know how and where to look for sperm. It is safe to